

LISTING OF THE CLAIMS

Claims 1-8 cancelled,

9. (Currently Amended) Coiling device to coil rolled or drawn long products, comprising a mandrel, arranged cantilevered and rotatable with respect to a central longitudinal axis, wherein said long products are able to be wound on said mandrel in adjacent and superimposed spirals, in order to form a compact coil having the geometric shape of a circular ring with lateral flanks substantially orthogonal, or very angled, with respect to said central longitudinal axis, wherein said mandrel comprises a flange substantially orthogonal, or very angled, with respect to said central longitudinal axis and able to define a first lateral flank of said coil, wherein said mandrel also comprises first arm elements, able to define the cylindrical surface of the core that forms said coil, and second arm elements, opposite said flange, and able to define a second flank of said coil, said first and said second arm elements being movable between a first coil-forming position and a second coil-removal position, wherein said second arm elements are provided with preventing means able to contact said first arm elements, in order to prevent said first arm elements from moving from said first coil-forming position to said second coil-removal position when said second arm elements are in said first coil-forming position, and wherein said second arm elements comprise a wall, which in said first coil-forming position is parallel to said flange, and a lower tooth which extends parallel to said central longitudinal axis and is

aligned with said first arm elements to cooperate with ~~the~~ a most external spiral of a first layer of said spirals of said coil and to facilitate ~~the~~ an inversion of deposition of said spirals.

10. (Previously Amended) Coiling device as in claim 9, characterized in that said mandrel also comprises a substantially cylindrical central body on which said first and said second arm elements are pivoted.

11. (Previously Presented) Coiling device as in claim 10, wherein first actuation means are mounted on said central body in order to command the displacement of said first arm elements between one or the other of said first and second positions.

12. (Previously Presented) Coiling device as in claim 11, wherein said first actuation means comprise levers pivoted on said central body.

13. (Previously Presented) Coiling device as in claim 10, wherein temporary positioning and clamping means, arranged on said central body, are associated with said first arm elements.

14. (Previously Presented) Coiling device as in claim 10, wherein control

means, arranged on said central body, are associated with said first arm elements in order to control their first position.

15. (Previously Presented) Coiling device as in claim 10, wherein second actuation means are mounted on said central body in order to command the displacement of said second arm elements between one or the other of said first and second positions.

16. (Previously Amended) Coiling device as in claim 15, wherein first actuation means are mounted on said central body in order to command the displacement of said first arm elements between one or the other of said first and second positions, wherein said second arm elements comprise a plurality of containing arms arranged at intervals around said central longitudinal axis and wherein said second actuation means comprise toothed elements associated with said containing arms and cooperating with rack means or endless screw means.

17. (Previously Amended) Coiling device as in claim 16, wherein said first actuation means comprise levers pivoted on said central body and wherein said levers and said rack means or said endless screw means are driven by rod means.

18. (Previously Amended) Coiling device as in claim 17, wherein said rod means comprise a rod arranged coaxial with said central longitudinal axis and movable axially between two defined positions.

19. (Previously Presented) Coiling device as in claim 17, wherein said rod means comprise a rod arranged coaxial with said central longitudinal axis and able to rotate, in one direction or another, by an angle of defined amplitude.

20. (Previously Presented) Coiling device as in claim 18, wherein said rod is hollow inside.

21. (Currently Amended) Coiling method to coil rolled or drawn long products, by means of a mandrel, arranged cantilevered and rotatable with respect to a central longitudinal axis, wherein said long products are able to be wound on said mandrel in adjacent and superimposed spirals, in order to form a compact coil having the geometric shape of a circular ring with lateral flanks substantially orthogonal, or very inclined, with respect to said central longitudinal axis, wherein said mandrel comprises a flange substantially orthogonal, or very inclined, with respect to said central longitudinal axis and able to define a first lateral flank of said coil, wherein in a first step to form said coil, said mandrel has first arm elements that is provided with a first inclined wall, said first arm elements are substantially parallel to said central longitudinal axis which define in

a first coil-forming position the cylindrical surface of the core that forms said coil, and second arm elements, opposite said flange, which define in a first coil-forming position a second lateral flank of said coil, wherein said second arm elements include a second inclined wall, which in said first coil-forming position is parallel to said flange, and a lower tooth which extends parallel to said central longitudinal axis and is aligned with said first elements to cooperate with a most external spiral of a first layer of said spirals of said coil and to facilitate an inversion of deposition of said spirals, wherein at the end of said first step to form said coil, said first and said second arm elements are displaced to a second position of non-interference with said coil [[,]] in order to allow said coil to be removed axially from the cantilevered end of said mandrel, wherein said first and second arm elements being movable between said first coil-forming position and a second coil-removal position, wherein said second arm elements are provided with preventing means able to contact said first arm elements in order to prevent said first arm elements from moving from said first coil-forming position to said second coil-removal position when said second arm elements are in said first coil-forming position [[,]] ~~wherein~~ in which each one of said first arm elements that is provided with a the first inclined wall, ~~which~~ is inclined with respect to said longitudinal axis and which in said first coil-forming position is in contact with a the corresponding second inclined wall provided in each one of said second arm elements, and wherein said flange comprises a deposition ring cooperating with said first arm elements in order to define the cylindrical winding surface of the first layer of spirals of said coil.

22. (Previously Amended) Coiling method as in claim 21, wherein in said second position of non-interference said first arm elements are inclined with respect to said central longitudinal axis, so as to define a substantially truncated cone surface converging towards said cantilevered end of said mandrel.

23. (Previously Amended) Coiling method as in claim 21, wherein in said second position of non-interference said second arm elements are substantially parallel to said central longitudinal axis and outside the space occupied by the formed coil.

24. (Previously Amended) Coiling method as in claim 21, wherein the displacement of said first and second arm elements to said second position of non-interference with said coil is achieved by rod means arranged coaxial with said mandrel.

25. (Previously Amended) Coiling method as in claim 21, wherein said second arm elements comprise a plurality of containing arms arranged at intervals around said central longitudinal axis and pivoted on a central body of said mandrel, and wherein said containing arms are pivoted on said mandrel by means of respective pins, in such a manner that during the movement of said containing arms from said first coil-forming position assumed in said first step to

form the coil to said second position of non-interference, said containing arms do not interfere with said spirals of said formed coil.

26. *Cancelled.*

27. (Previously Presented) Coiling method as in claim 21, wherein said second arm elements comprise a supporting surface able to cooperate with the most external spiral of the first layer of spirals of said coil.

28. (Previously Presented) Coiling method as in claim 24, wherein the displacement of said first arm elements between one or the other of the positions to form the coil and of non-interference is achieved by first actuation means connected to said rod means.

29. (Previously Presented) Coiling method as in claim 21, wherein temporary positioning and clamping means, arranged on a central body of said mandrel, are associated with said first arm elements.

30. (Previously Presented) Coiling method as in claim from 21, wherein control means associated with said first arm elements control the coil-forming position of said first arm elements.